



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,725	07/28/2003	Ho-Jin Kweon	66253 / P849	7093
23363	7590	09/22/2010	EXAMINER	
CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068				CREPEAU, JONATHAN
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
09/22/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Response to Arguments***

1. Applicant's arguments filed September 13, 2010 have been fully considered but they are not persuasive. In response to the argument that "Kweon appears to actually teach away from drying the coated lithiated compound at a temperature between 60°C and 100°C, by stating that heat-treating at temperatures lower than 100°C prohibits free movement of lithium ions in the active material," it is initially noted that this argument is not commensurate in scope with the claims. The claimed temperature range encompasses a value of exactly 100°C, which is also disclosed by the reference. Accordingly, the claimed temperature range is at least overlapped by the reference and is therefore obvious. In addition, in making the combination of references, the artisan would be sufficiently skilled to maintain a drying temperature so as to **not** further oxidize the hydroxide of JP '027. It is the Office's position that a skilled artisan would be motivated to replace the vanadium pentoxide of Kweon et al. with the hydroxide material of JP '027 (for the reasons stated in the rejection), and to manufacture this electrode material in an appropriate way, i.e., by drying the material at a relatively low temperature. Thus, applicant's argument that Kweon teaches away from drying temperatures does not account for the fact that the vanadium pentoxide of Kweon would be **replaced** by the hydroxide. As it is well-known to persons skilled in the art that hydroxides cannot be subjected to extreme temperatures and maintain their chemical integrity, it follows that a skilled artisan would be able to select an appropriate drying temperature for the hydroxide-coated active material. The courts have held that an obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some

combinations would have been obvious where others would not. *Leapfrog Enterprises Inc. v. Fisher-Price Inc.*, 82 USPQ2d 1687 (Fed. Cir. 2007); see also *KSR v. Teleflex*, 82 USPQ2d 1385, 127 S. Ct. 1727 (2007). Further, according to the knowledge of a person skilled in the art, such a drying temperature would provide a **predictable** result of maintaining the structure of the hydroxide. Accordingly, the claimed temperature range is not believed to provide “new and unexpected results,” as asserted by Applicants.

In response to the argument that “[t]o not heat above 100°C would render Kweon unsatisfactory for its intended purpose,” it is first noted that the temperature of exactly 100°C of Kweon overlaps with the claimed range and is still applicable. Further, it is submitted that the “intended purpose” of Kweon (as characterized by Applicants) is solely directed to the **vanadium oxide** (see col. 2, line 62) and would not be applicable to the hydroxide coating. Thus, once the hydroxide is used in Kweon, the “intended purpose” of the coating is modified. Accordingly, it is not believed that a lower drying temperature would render such a material “unsatisfactory for its intended purpose.” To the contrary, as stated above, the material would require processing at low temperatures to maintain its integrity. As such, this argument is also not persuasive.

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley, can be reached at (571) 272-1453. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jonathan Crepeau/  
Primary Examiner, Art Unit 1795  
September 18, 2010